

**UNITED STATES DISTRICT COURT  
MIDDLE DISTRICT OF TENNESSEE  
NASHVILLE DIVISION**

|                             |   |                      |
|-----------------------------|---|----------------------|
| <b>GIBSON GUITAR CORP.,</b> | ) |                      |
|                             | ) |                      |
| <b>Plaintiff,</b>           | ) |                      |
|                             | ) |                      |
| <b>v.</b>                   | ) | <b>No. 3:11-0058</b> |
|                             | ) | <b>Judge Sharp</b>   |
| <b>745 LLC,</b>             | ) |                      |
|                             | ) |                      |
| <b>Defendant.</b>           | ) |                      |

**MEMORANDUM**

This is a patent infringement action in which Plaintiff Gibson Guitar Corp. (“Gibson”) claims that Defendant 745 LLC (“745”) infringed on United States Patent No. 5,990,405 and Reexamined Patent Certificate No. 7199 (together “the `405 Patent”). The parties have requested the Court construe the claims in the `405 Patent, and their respective positions in relation to claim construction have been extensively briefed (Docket Nos. 41, 53, 54, 65, 76 & 88).

On November 22 and 23, 2011, the Court held a hearing on claim construction in accordance with Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996), and, in anticipation of that hearing, the parties filed motions to strike and/or limit the testimony of expert witnesses who had submitted declarations and were expected to be called as witnesses (Docket Nos. 63 & 69). After the Markman hearing, and with leave of the Court, the parties filed a Supplemental Joint Claim Construction Chart. (Docket No. 90).

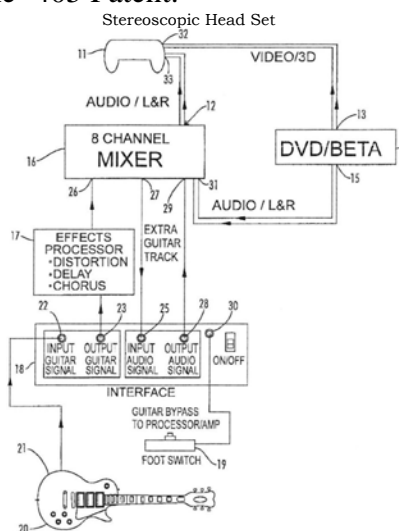
In addition to the joint request for claim construction, 745 has filed a Motion for Application of Collateral Estoppel (Docket No. 50) in which it seeks to estop Gibson from seeking claim constructions which are at odds with the claim constructions rendered by the United States District

Court for the Central District of California in Activision Publishing, Inc. v. Gibson Guitar Corp., Case No. CV 08-1653-MRP (C.D. Ca. 2008). That motion, too, has been fully briefed (Docket Nos. 51, 64 & 72).

## **I. FACTUAL AND PROCEDURAL BACKGROUND**

The `405 Patent, issued November 23, 1999, is titled “SYSTEM AND METHOD FOR GENERATING AND CONTROLLING A SIMULATED MUSICAL CONCERT EXPERIENCE.” Gibson describes the invention as “generally relat[ing] to audio and video simulations of a pre-recorded musical performance and more particularly to the generation and control of a simulated musical concert experience and participation by a musician using a musical instrument control device.” (Docket No. 54 at 1).

According to the Abstract which summarizes the invention, “[a] musician can simulate participation in a concert by playing a musical instrument and wearing a head-mounted 3D display that includes stereo speakers.” (`405 Patent, Docket No. 1-1, Abstract). A typical embodiment is found in figure 1 of the `405 Patent:



(Docket No. 1-1, `405 Patent, Fig. 1). The above-embodiment discloses the use of a stereoscopic

headset, an AV player, a mixer, an effects processor, a system interface, a bypass foot switch, and a guitar.

In simple terms, the musician plugs a musical instrument (in the diagram, a guitar 20) into the interface device 18. The AV player (in the diagram, a DVD/BETA player 13) plays a recording of a concert, which includes separable instrument sound tracks. As the musician plays his or her instrument, audio signals are transmitted to the interface box 18 which then outputs the instrument music track to the mixer 15. There, it is combined with the left and right audio track of the pre-recorded concert and played back to the musician along with the video of the concert through the stereoscopic headset 11.

The `405 Patent also allows the musician to bypass the interface device by pressing the foot switch 19. In doing so, a separable instrument sound track (e.g. a lead guitar track) is muted, and the audio signals generated by the guitar are combined with the left and right audio portions of the concert. Thus, the musician hears what he or she is actually playing mixed with the rest of the soundtrack (e.g. drums, keyboards, and vocals), while at the same time watching the actual concert footage in the headset.

Gibson claims that 745's product called "PowerGig Rise of the Six-String" ("PowerGig") infringes the `405 Patent. PowerGig is an animated music videogame sold for use with the Microsoft Xbox or the Sony Playstation gaming systems, and comes with an electric guitar/game controller and software.

The PowerGig guitar has six strings and can be played as a conventional electric guitar by plugging it into an amplifier. Alternatively, the device can be played as part of a game whereby the player uses the guitar as a game controller. These methods of use are mutually exclusive: the

player can use the device as an electric guitar, or use the guitar as a game controller in which it is not capable of playing music. 745 has obtained a design patent and a utility patent<sup>1</sup> on its dual mode controller, and has other patents pending. U.S. Patent Nos. 8,017,857 and D637,190.

To use the guitar in the game mode, the player engages a strum lock which is a rubber damper that prevents the strings of the guitar from vibrating. In this mode, the controller outputs digital, wireless signals based on the gestural commands of the user, and the Xbox or Playstation interprets those commands so that the player can score points in the game.

In some respects, PowerGig used in the game mode is akin to the “Guitar Hero” videogame, which was the subject of the Activision litigation. Guitar Hero comes with software that is usually bundled with a guitar-shaped game controller.

Unlike the PowerGig guitar, however, the Guitar Hero controller has no strings and cannot be played as a conventional guitar. Players use the game controller to simulate playing rock songs, and are shown on screen as an avatar character performing on stage. The player matches notes that scroll across a television (or other video screen) by touching colored fret buttons on the controller.<sup>2</sup> Those gestures are interpreted by a device, such as a PlayStation or Xbox, and translated into points.

In the Activision case, Activision filed a declaratory judgment action against Gibson on March 11, 2008, seeking a declaration of non-infringement and invalidity of the `405 Patent. On September 16, 2008, the Activision court issued a Claim Construction Order wherein the court construed two terms from the `405 Patent.

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<sup>1</sup> Generally, a “design patent” protects the way an article looks, 31 U.S.C. § 171, while a “utility patent” protects the way the article is used, 31 U.S.C. § 101.

<sup>2</sup> The PowerGig guitar also has colored bands on the neck of the guitar and can be used to play the Guitar Hero game.

The Activision court found “musical instrument” to mean “an instrument that is capable of making musical sounds, and either directly, or indirectly through an interface device, producing an instrument audio signal representative of those sounds.” Activision, Case No. CV 08-1653-MRP, Docket No. 146 at 7. The court also construed “instrument audio signal” to mean “an electrical output by a musical instrument.” Id. Although finding “some merit” in Activision’s argument that “instrument audio signals” are “analog and constrained to frequencies that can be heard,” the court found “no reason, at this time” to exclude digital instruments from the scope of the `405 Patent. Id. at 18-19).

Based upon the claim construction ruling, Activision filed a Motion for Summary Judgment and Gibson filed a Motion for Reconsideration. On February 26, 2009, the court denied Gibson’s request for reconsideration, and granted summary judgment in favor of Activision on its non-infringement claim.

The Activision court began its introduction to the summary judgment ruling with “a general observation” that “no reasonable person of ordinary skill in the relevant arts would interpret the `405 Patent as covering interactive video games.” Activision Publ’g, Inc. v. Gibson Guitar Corp., 2009 WL 586629 at \*5 (C.D. Cal. Feb. 26, 2009). The court went on to hold that the Guitar Hero controller was not a musical instrument within the meaning of the `405 Patent because the sounds it makes are not musical, the controller does not output an instrument audio signal representative of the sounds of the musical instrument, and the controllers are of the type of device that the `405 Patent disavows. Id. at \*\*5-9. With regard to the types of devices disavowed by the `405 Patent, the court ruled (in accordance with its Claim Construction Order) that “the `405 Patent disavows systems that either (1) do not involve ‘actual operation of a musical instrument’ or (2) use virtual

reality-type control devices,” and that “[t]he Guitar Hero controllers fall within both disavowed categories.” Id. at 9.

The court also revisited Activision’s analog argument,<sup>3</sup> finding that “a person having ordinary skill in the art would read the ‘audio signal’ of the `405 Patent to be limited to analog, but not digital sounds.” Id. at \*12. Nevertheless, the court refused “to further limit ‘instrument audio signal’ to ‘audible’ signals or to ‘electrical’ signals of the type output by the `405 Patent’s example instruments, despite reasonable arguments for such constructions.” Id.

After the summary judgment ruling, the parties settled the Activision case, and Gibson did not appeal either the Claims Construction Order or the summary judgment ruling. Instead, and in accordance with the settlement agreement, the parties filed a joint stipulation of dismissal with prejudice. The parties also agreed that the court’s Claim Construction Order and summary judgment ruling would “be binding upon the parties” and their successors, and that “the orders will have both res judicata and collateral estoppel effect” as between Activision and Gibson. (Docket No. 52-3 at 2 ¶5). The Activision case was dismissed on April 17, 2009.

Within weeks of Activision’s filing of the declaratory judgment action, an undisclosed third party filed an *ex parte* reexamination request with the Patent Office, requesting a reexamination of claims 1-4, 7-11, 13-15, 18, 20, 21, 24 and 28 of the `405 Patent based upon five pieces of prior art. That request was granted on May 29, 2008, and a reexamination was ordered for claims 1-30.

After the court in Activision issued its claims construction and summary judgment rulings, the Patent Office, on March 27, 2009, issued issued a non-final rejection of claims 1-21, 23-25 and

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<sup>3</sup> “[D]istrict courts may engage in a rolling claim construction, in which the court revisits and alters its interpretation of the claim terms as its understanding of the technology evolves.” Pfizer, Inc. v. Teva Pharm., USA, Inc., 429 F.3d 1364, 1377 (Fed. Cir. 2005).

28, and confirmation of claims 22, 26, 27, 29 and 30. (Docket No. 55-7). In response, and after the parties entered their settlement agreement, Gibson, on May 27, 2009, amended claims 1, 13, 18, 22, 25, 26, 28, and 29, cancelled claims 23 and 24, and submitted new claims 31-46. In doing so, Gibson specifically represented that it had “amended independent Claims 1, 13, 15 and 28 to clarify the scope of the claims based on the Examiner’s comments and to make them consistent with the district court’s construction of the claim terms” in the “claim construction and summary judgment orders” issued by the Activision court. (Docket No. 54-5 at 12).

The Patent Office issued a Notice of Intent to Issue *Ex Parte* Reexamination Certificate on September 3, 2009, stating that “[a] decision favorable to patentability of claims 1-20, 22, 25-30 and newly added claims 31-46 is given in this office in view of [Gibson’s] Amendment filed 05/27/2009.” (Docket No. 54-6 at 2). Thus, claims 1-20, 22 and 25-30 were confirmed, newly added claims 31-46 were found to be patentable, and claims 21, 23 and 24 were cancelled. (*Id.*).

The *Ex Parte* Reexamination Certificate was issued on December 1, 2009. This litigation followed on January 19, 2011.

## **II. APPLICATION OF LAW**

### **A. Motion for Application of Collateral Construction**

Because collateral estoppel “is a procedural issue not unique in patent law,” the Court applies the law of the “regional circuit,” and not Federal Circuit law. See, Abbott Lab. v. Andrx Pharmaceuticals, Inc., 473 F.3d 1196, 1201 (Fed. Cir. 2007). Under Sixth Circuit law, “[t]he doctrine of collateral estoppel operates when three requirements are met: (1) the issue in the current action and the prior action are identical; (2) the issue was actually litigated; and (3) the issue was necessary and essential to the judgment on the merits.” Federal Home Loan Mortg. Corp. v. Lamar,

503 F.3d 504, 509 n. 4 (6<sup>th</sup> Cir. 2007). Each of those elements have been met in this case.

In the Activision case, the terms “musical instrument” and “instrument audio signal” were construed by the court as a part of the claims construction process. Likewise, the parties in this case have both identified those very same terms as terms from the ‘405 Patent that must be construed during the claims construction process.

Further, the terms were fully litigated in the Activision case. In the Claims Construction Order, the court indicated that the parties (Activision and Gibson) provided briefing on those two terms, the court held a Markman hearing on the construction of those terms which included testimony from expert witnesses (including Dr. Gareth Loy who testified in this case), and the parties submitted post-hearing briefs on those two terms. It was only after all of this, that the court entered its Claims Construction Order. (See, Docket No. 54-7 at 1).

Additionally, the interpretation of those two terms was essential to the judgment on the merits because it was critical to the court’s ruling on non-infringement in the summary judgment ruling. Indeed, the court prefaced its summary judgment ruling by rejecting Gibson’s Motion to Reconsider the court’s earlier claim construction of the term “musical instrument,” went on to reiterate its prior construction of that term, and ruled there was no infringement because the Guitar Hero controller did not meet the definition of musical instrument. (Docket No. 54-8 at 7-9 & 12-18). “Instrument audio signal” was also essential to the summary judgment ruling, as the court devoted an entire section of its opinion to that term under the heading: “The Guitar Hero controllers do not infringe because they do not produce instrument audio signals within the meaning of the ‘405 Patent.” (Id. at 19-22).

“[S]ummary judgment is recognized as a final judgment for the purpose of issue preclusion,”



Nat'l Stellite Sports, Inc. v. Eliadis, Inc., 253 F.3d 900, 910 (6<sup>th</sup> Cir. 2001), and “a dismissal of a claim with prejudice pursuant to a negotiated settlement is an adverse adjudication on the merits of the claim.” Rio Grande, El Paso and Santa Fe R. Co. v. Dep't of Energy, 234 F.3d 1, 7 (Fed. Cir. 2000) (citation omitted). Here, not only was there an adverse summary judgment ruling, but Gibson agreed to a stipulated dismissal with prejudice, notwithstanding the Activision court's claim constructions as set forth in both its Claim Construction Order and its summary judgment ruling. Thus, Gibson is estopped from relitigating the terms “musical instrument” and “instrument audio signal” in this case.

In reaching the foregoing conclusion, the Court has thoroughly considered Gibson's arguments that collateral estoppel should not apply.

Gibson first argues that none of the elements for collateral estoppel are met because the Activision litigation involved the original '405 Patent, and not as it was amended in Reexamined Patent Certificate No. 7199. Were the issue one of the scope of the claims as a whole, there might be some merit to Gibson's argument, but 745's Motion for Application of collateral estoppel relates to two specific terms in the claims, terms that are identical in both the original patent and the reexamined patent. Gibson is precluded from trying to expand on the meaning of those terms through the reexamination proceedings because, while a patent owner may propose amendments to his or her patent “in order to distinguish the invention as claimed from the prior art . . . or in response to a decision adverse to the patentability of a claim . . . no proposed amendment or new claim enlarging the scope of a claim of the patent will be permitted in a reexamination proceeding[.]” 35 U.S.C. § 305. In other words, “although a patentee is permitted to amend both the claims and the specification of his patent on reexamination, . . . he is not allowed to do so in a

manner that has the effect of enlarging the scope of the patent's claims.” In re Reiffin Family Trust, 340 Fed.Appx. 651, 659 (Fed. Cir. 2009).

More fundamentally, Gibson effectively embraced the Activision court's claim construction during the reexamination proceedings, and this applies not only to the terms “musical instrument” and “instrument audio signal” as set forth in the Claims Construction Order, but also the refinement in the summary judgment ruling that “audio signal” is limited to analog, but not digital signals. It did so by specifically apprising the patent office it had “amended independent Claims 1, 13, 15 and 28 to clarify the scope of the claims based on the Examiner's comments and to *make them consistent with the district court's construction of the claim terms*,” citing both the Activision court's Claim Construction Order *and* summary judgment ruling, and “request[ing] that the Examiner consider these documents and officially make them of record[.]” (Docket No. 55-15 at 12 & 18).

To the extent Gibson does not agree with the Activision court's construction of the terms “musical instrument” and “instrument audio signal,” Gibson has been hoisted by its own petard because “[t]he patentee is bound by representations made and actions that were taken in order to obtain the patent.” Typhoon Touch Tech., Inc. v. Dell, Inc., 659 F.3d 1376, 1381 (Fed. Cir. 2011). Gibson made no effort to avoid the analog ruling during the reexamination proceeding, did not seek to convince the examiner that the Activision court was in error, and did not seek a claim construction that “instrument audio signal” included digital signals. Rather, it informed the examiner that it would accept the Activision court's claim construction – claim construction that were contained both in the Claim Construction Order and the summary judgment ruling. See, Vita-Mix Corp. v. Basic Holding, Inc., 581 F.3d 1317, 1324 (Fed. Cir. 2009) (“A patentee may, through a clear and unmistakable disavowal in the prosecution history, surrender certain claim scope to which he would

otherwise have an exclusive right by virtue of the claim language”). Gibson cannot now urge this Court to interpret those terms yet another way. See, Southwall Tech., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1576 (Fed. Cir. 1995) (“The prosecution history limits the interpretation of claim terms so as to exclude any interpretation that was disclaimed during prosecution,” and, therefore, “[c]laims may not be construed one way in order to obtain their allowance and in a different way against accused infringers”).

Gibson also argues that, insofar as the Activision court ruled the term “instrument audio signals” is limited to analog signals, that holding, being the last of the four grounds mentioned in the summary judgment opinion, was an “afterthought” and “clearly . . . a secondary ground.” (Docket No. 64 at 14). The Court does not read the summary judgment ruling that way. Even though there were four basis for the non-infringement decision, the Activision court did not assign a hierarchy of importance to those four reasons. Quite the contrary, the court clearly stated that the fact that the Guitar Hero controllers send digital signals made “summary judgment . . . appropriate on this independent ground.” (Docket No. 54-8 at 22).

As Gibson points out, there is authority for the proposition that where “one ground for the decision is clearly primary and the other only secondary, the secondary ground is not ‘necessary to the outcome’ for the purposes of issue preclusion.” Nat’l Satellite Sports, Inc. v. Eliadis, Inc., 253 F.3d 900, 909 (6<sup>th</sup> Cir. 2001). Yet, even assuming that the analog/digital distinction was but a “secondary” ruling and any one of the prior three grounds was the “primary” basis for the ruling, Gibson cannot ignore the fact that it represented to the patent examiner that its construction of the patent, as amended, was in keeping with the claim construction rulings of the Activision court as expressed in both the Claim Construction Order and the summary judgment ruling.

In the summary judgment ruling, the Activision court indicated that it was revisiting and revising its construction of “instrument audio signal,” and made clear beyond peradventure of doubt that it was construing “instrument audio signal” to exclude digital signals. If, as Gibson posits, “the Examiner was made aware of the Summary Judgment Order and clearly understood that the prior art taught use of MIDI data,” (Docket No. 64 at 10), then the Examiner also clearly understood that the Activision court construed “instrument audio signal” to exclude digital signals, and that Gibson was seeking to amend its patent in conformity with that construction.

#### **B. General Principles Relating to Claim Construction**

Claim construction is a two-step process. In the first step, which the Court undertakes now, the Court determines, as a matter of law, the scope of the patent claim. See Markman, 517 U.S. at 384, 388; Altiris, Inc. v. Symantec Corp., 318 F.3d 1363, 1368 (Fed. Cir. 2003); Teleflex, Inc. v. Ficos North Am. Corp., 299 F.3d 1313, 1323 (Fed. Cir. 2002). Once that scope is determined, the allegedly infringing device is compared to the patent claims, and, if necessary, a jury (or a court in a bench trial or on summary judgment) determines, as a matter of fact, whether all of the limitations of at least one claim are present, either literally or by a substantial equivalent, in the accused device. Teleflex, Inc., 299 F.3d at 1323; Southwall, 54 F.3d at 1575.

“[A] patent must describe the exact scope of an invention and its manufacture to ‘secure to [the patentee] all to which he is entitled, [and] to apprise the public of what is still open to them.’” Markman, 517 U.S. at 373 (citation omitted). This is accomplished in the claim(s) and the specification(s) which are set forth in the patent document and required by statute.<sup>4</sup>

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<sup>4</sup> Section 112 of title 35 provides:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any

“It is well-settled that, in interpreting an asserted claim, the court should look first to the intrinsic evidence of record, *i.e.*, the patent itself, including the claims, the specification and, if in evidence, the prosecution history.” Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996). “Such intrinsic evidence is the most significant source of the legally operative meaning of disputed claim language,” and, therefore, resort to extrinsic evidence such as expert opinions and dictionaries is improper unless the analysis of the intrinsic evidence does not resolve any ambiguities in the claim terms. Id. at 1583.

“All intrinsic evidence is not equal however.” Interactive Gift Exp., Inc. v. Compuserve Inc., 256 F.3d 1323, 1331 (Fed. Cir. 2001). Rather, a court looks first to the claim language. Id. “If the claim language is clear on its face, then . . . consideration of the rest of the intrinsic evidence is restricted to determining if a deviation from the clear language of the claims is specified.” Id. “If however the claim language is not clear on its face, then . . . consideration of the rest of the intrinsic evidence is directed to resolving, if possible, the lack of clarity.” Id.

In construing a disputed claim term, the term is given its “ordinary and customary meaning,” which “is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” Phillips v. AWH Corp., 415 F.3d 1303, 1313 (Fed. Cir. 2005). This

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person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

A claim may be written in independent or, if the nature of the case admits, in dependent or multiple dependent form.

35 U.S.C. § 112.

“provides an objective baseline from which to begin claim interpretation,” because “patents are addressed to and intended to be read by others of skill in the pertinent art.” Id.<sup>5</sup>

“If the meaning of the claim limitations is apparent from the totality of the intrinsic evidence, then the claim has been construed.” Interactive Gift Exp., Inc. v. Compuserve Inc., 256 F.3d 1323, 1332 (Fed. Cir. 2001). “If however a claim limitation is still not clear, [a court] may look to extrinsic evidence to help resolve the lack of clarity,” id., and to assist the court in “comprehending the technology in accordance with the understanding of skilled artisans[.]” Altiris, Inc., 318 F.3d at 1369. “Extrinsic evidence may never be relied upon, however, to vary or contradict the clear meaning of terms in the claims.” Id. “Any other rule would be unfair to competitors who must be able to rely on the patent documents themselves, without consideration of expert opinion that then does not even exist, in ascertaining the scope of a patentee’s right to exclude.” Southwall Technologies, Inc., 54 F.3d at 1578.

With these legal principles in mind, the Court turns to the claim construction in this case. First, however, the Court must address the Motions to Strike certain expert testimony because opinions expressed by those experts have been presented by the parties as a part of the claim construction process.

### **C. Motions to Strike**

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<sup>5</sup> “Importantly, the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.” Id. The specification can be highly relevant to the claim construction analysis because, by way of examples, the inventor may define his own terms in the specification, or “[t]he patentee may demonstrate an intent to deviate from the ordinary and accustomed meaning of a claim term by including in the specification expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope.” Teleflex, 299 F.3d at 1325; see, Interactive Gift, 256 F.3d at 1331 (citation omitted) .

Gibson moves to strike portions of the declaration of Dr. Gareth Loy (“Loy”), while 745 has filed a conditional motion to strike the testimony of Dr. Parameswaran Ramanathan (“Ramanathan”).<sup>6</sup> Those requests will be denied.

### **1. Loy’s Declaration**

Loy, who holds a Doctor of Musical Arts degree from Stanford University, is the President of Gareth, Inc., a consulting firm that provides consulting services in computer science, software, musical technology, and digital audio and sound synthesis. He taught at the college level in the fields of designing and implementing computer systems for musical applications, and has been widely published. He has submitted a lengthy declaration and testified extensively on behalf of 745 at the Markman hearing.<sup>7</sup>

Gibson moves to strike many of the paragraphs in Loy’s declaration claiming that Loy’s opinions are not relevant under Fed. R. Evid. 402, are prejudicial and a waste of the Court’s time under Fed. R. Evid. 403, and/or he is not qualified as an expert under Fed. R. Evid. 702 and Daubert v. Merrell Dow Pharm. Inc., 509 U.S. 579 (1993). None of Gibson’s arguments are persuasive.

Gibson’s relevancy, prejudice and waste of time arguments relate to Loy’s references and descriptions of PowerGig in his declaration. Gibson notes that claim construction is a two-step process, and “[b]ecause the Court cannot use 745’s accused device with the objective of construing the claim terms of the ‘405 Patent, the copious portions of Loy’s declaration addressing infringement analysis are wholly irrelevant during the first phase of patent litigation, the claim construction phase,

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<sup>6</sup> As a part of that motion, 745 also seeks to strike the testimony of Bruce Edwin Wilson (“Wilson”) because, in rendering his expert opinion, he allegedly did not read the patent in issue. This aspect of the motion is denied because Wilson did not testify at the Markman hearing, and the Court does not rely on his declaration or deposition testimony in formulating this opinion.

<sup>7</sup> Loy also served as an expert in the Activision case.

and should be stricken from the record.” (Docket No. 63 at 3-4). Gibson goes on to assert that “[r]eview of the allegedly infringing device is proper only during the second, jury phase of the litigation.” (Id. at 4).

Even though the Court is not now called upon to determine whether PowerGig infringes the `405 Patent, Gibson’s suggestion that the Court cannot consider the accused device in connection with claim construction is wrong.

Just last month, the Federal Circuit reiterated its position that “[i]t is not inappropriate for a court to consider the accused devices when construing claim terms, for the purpose of ‘claim construction’ is to resolve issues of infringement.” Typhoon Touch Technologies, Inc. v. Dell, Inc., 659 F.3d 1376, 1383 (Fed. Cir. 2011). In doing so, the court quoted Pall Corp. v. Hemasure Inc., 181 F.3d 1305, 1308 (Fed. Cir. 1999) for the proposition that “[a]lthough the construction of the claim is independent of the device charged with infringement, it is convenient for the court to concentrate on those aspects of the claim whose relation to the accused device is in dispute.” Id. Analysis of the accused device provides context and “[i]ndeed, better understanding of the context of the claim construction as a case proceeds through an infringement determination can appropriately lead a district court to change its initial claim construction.” Jang v. Boston Scientific Corp., 532 F.3d 1320, 1337 (Fed. Cir. 2008).

Gibson also argues that Loy is not qualified within the meaning of Daubert and Rule 702. Specifically, Gibson claims that Loy is not qualified to render legal opinions or to discuss the circuitry of the `405 Patent. It also argues that Loy’s testimony is unreliable because (1) he compares the PowerGig to Guitar Hero (which the Court rejects for the reasons just stated); (2) he was an expert witness who testified adverse to Gibson in the Activision case; and (3) his declaration



contains “errors and inconsistencies.” (Docket No. 63 at 14).

Rule 702 relates to the introduction of expert testimony and codified the Supreme Court’s decision in Daubert, which held that the then-effective Rule 702 “clearly contemplates some degree of regulation of the subjects and theories about which an expert may testify” and “assign[s] to the trial judge the task of ensuring that an expert’s testimony both rests on a reliable foundation and is relevant to the task at hand.” Daubert at 509. This “gatekeeping” function has as its objective “to ensure the reliability and relevancy of expert testimony,” and “to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.” Kumho Tire Co., Ltd. v. Carmichael, 526 U.S. 137, 152 (1999).

As a preliminary matter, Daubert’s concern is with the jury hearing opinion testimony that is not up to standards -- a concern not present at this time. This Court is quite capable of separating the wheat from the chaff and can review Loy’s declaration and testimony to determine qualifications and relevance without having to rule on the admissibility of each of the 99 numbered paragraphs of the declaration. See, Deal v. Hamilton County Bd. of Educ. 392 F.3d 840, 852 (6<sup>th</sup> Cir. 2004) (“[T]he ‘gatekeeper’ doctrine was designed to protect juries and is largely irrelevant in the context of a bench trial”); In re Zurn Pex Plumbing Products Liability Litigation, 644 F.3d 604, 613 (8<sup>th</sup> 2011) (“The main purpose of Daubert exclusion is to protect juries from being swayed by dubious scientific testimony” and “[t]hat interest is not implicated . . . where the judge is the decision maker”).

In any event, the Court will not strike any of the paragraphs of Loy’s declaration. True, he is not a lawyer and may not render legal opinions, but the Court does not read his declaration as

attempting to render any such opinion. Rather, Loy reviewed the prosecution history in reaching his conclusions about the meaning or scope of the patent to one skilled in the art, something that is not uncommon in patent cases. See, Insko Intern., Inc. v. Conductus, Inc., 279 F.Supp.2d 489, 497 (D. Del. 2003) (“These experts reviewed the prosecution history of the patent [in issue], the patent claims, [and] the state of the art at the relevant time period”); cf., Intex Rec. Corp. v. Metalast, S.A., 245 F.Supp. 2d 65, 78 (D.D.C. 2003) (ladder expert’s failure to review the prosecution history of the patent in issue was not fatal to his testimony); see also, Edward G. Poplawski, SELECTION AND USE OF EXPERTS IN PATENT CASES, 9 Fed. Cir. B. J. 145, 163 (1999) (footnote omitted) (“A careful reading of Southwall Technologies, Inc. v. Cardinal IG Co., and other decisions also suggests that, in order to be considered, the expert testimony must explain in detail what the disputed term means to one of ordinary skill in the art, when viewed in light of the claims, the specification, and the prosecution history”).

Loy is also not an electrical engineer. However, in his deposition, Loy testified that the fields of computer science and music technology require “pretty extensive knowledge of analog electronics, analog to digital conversion, digital to analog conversion, digital signal processing, logic, circuit design, architecture of master processors, and the like.” (Docket No. 70-1 at p. 9). He also testified that he taught college courses relating to circuit designs. (Id. at 10). Certainly Loy is competent to testify about whether the `405 Patent and the diagram contained therein (Fig. 2) discloses analog or digital circuitry.

Finally, Loy is not an unreliable witness within the meaning of Daubert merely because he testified against Gibson in the past and his declaration may contain mistakes or inconsistencies. Such things go to the weight, not the admissibility of his testimony.

## 2. Ramanathan's Testimony

As noted, 745's motion to strike the testimony of Ramanathan is conditional. It is conditioned on this Court's acceptance of Gibson's purported definition of an ordinary person skilled in the art. The definition to which 745 points,<sup>8</sup> however, is cobbled together from two paragraphs of *Wilson's* declaration who rendered his opinion as a longtime builder and repairer of guitars. In contrast, Ramanathan's testimony goes to the interpretation of the '405 Patent's circuitry. See, Bd. of Regents of Univ. of Texas Sys. v. Beng, 2006 WL 6112210 at \*5 n.5 (W.D. Tex. July 14, 2006) ("there is no reason to believe that someone who is skilled in at least one relevant field can have nothing useful to say, especially in the case of an invention that makes contributions to more than one field of study").

As a Professor in the Department of Electrical and Computer Engineering at the University of Wisconsin, Madison, Ramanathan is certainly qualified to render the opinions he has made in this case which are, primarily, that the circuitry contained in the diagram (Fig. 2) of the '405 Patent could be easily modified to receive a digital audio signal, and that, at the time of the invention, it was known that strumming of guitar strings could be converted to digital signals which, in turn, could be transmitted to a remote receiver by wires, lights, optical fibers, or radio waves. 745 admits

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<sup>8</sup> In its Motion, 745 sets forth the definition as follows:

The ordinary person in the field of electronic music making systems is self-taught with lots of on-the-job training and varied experiences. Such an individual often lacks formal academic training in the art. The ordinary person in this area is generally a musician who tends to use words loosely as opposed to in an academically rigid manner. Terms tend to be used as they are needed and in the interest of expediency versus based on a specialized academic definition.

(Docket No. 69 at 2 ¶ 3).

as much. (See, Docket No. 69 at 2 ¶ 2 (745 “does not challenge that Dr. Ramanathan is qualified to provide the opinions offered in his declaration”).

#### **D. Claim Construction**

In its initial claim construction briefing, 745 put forth more than thirty terms for construction. During a telephone conference on November 15, 2011, the Court indicated that, to make things manageable, it would consider ten claims for construction at the Markman hearing, specifically terms found in claims 1, 2, 3, 8, 13, 14, 25, 28, 33, and 34. Having heard the evidence, and having considered the parties’ arguments and the record, the Court now determines that it suffices at this time to further limit the construction of claims to certain terms found in claim 1 which are carried over into many of the other claims, while reserving the right to construe other claim terms should it become necessary. See, Conoco, Inc. v. Energy & Env’t Intern., L.C., 460 F.3d 1349, 1359 (Fed. Cir. 2006) (“a district court may engage in claim construction during various phases of litigation, not just in a Markman order”).

As amended, Claim 1 (with the pertinent terms bolded) reads:

**1. A system for electronically simulating participation by a user in a pre recorded musical performance** comprising:

- a. **a musical instrument adapted for (i) making musical sounds and (ii) generating an instrument audio signal representative of the musical sounds** at an instrument audio output, the instrument audio signal comprising an electrical signal output by the musical instrument that varies in response to operation of the instrument by the user of the system;
- b. a video source providing a source video signal at a source video output, the source video signal representing a video portion of the pre recorded musical performance;
- c. a video display responsive to the source video signal whereby the

user can view the video portion of the pre recorded musical performance on the video display;

d. an audio source providing a source audio signal at a source audio output, the source audio signal representing an audio portion of the pre recorded musical performance, the audio portion including an instrument sound track containing pre recorded musical sounds that would be generated by the musical instrument in the pre recorded musical performance;

e. a system interface device having a first audio input electrically connected to the instrument audio output, a second audio input electrically connected to the source audio output, and a first interface audio output;

f. the system interface device including a source audio control circuit responsive to the instrument audio signal, whereby a characteristic of the source audio signal is controlled in response to operation of the musical instrument by the user to provide a controlled source audio signal at the first interface audio output; and

g. an audio playback transducer responsive to the controlled source audio signal such that the user can listen to the audio portion of the pre recorded musical performance on the transducer, in synchronization with the video portion.

(Docket No. 90, Appx. A at 6).

**1. A system for electronically simulating participation by a user in a pre-recorded musical performance**

Based on the record, the Court finds that “a system for electronically simulating participation by a user in a pre recorded musical performance” means a system wherein the user experiences being a performer in an actual concert involving live (as opposed to computer created) musicians. This is supported by the intrinsic evidence in the record, specifically, the specifications and the claims of the `405 Patent.

Throughout the specifications, the invention speaks about a prerecorded musical performance and/or a musical concert experience, terms which in the context of the invention suggest the use of

recordings of live performances. The invention is titled a “SYSTEM AND METHOD FOR GENERATING AND CONTROLLING A SIMULATED MUSICAL CONCERT EXPERIENCE,” and in the abstract is described as a system wherein “[a] musician can simulate participation in a concert by playing a musical instrument.” (Docket No. 1-1 at 2).

Further, the “Background of the Invention” indicates that “[t]he present invention relates generally to audio and video simulations of a pre-recorded musical performance,” and “[m]ore particularly, this invention pertains to the generation and control of a simulated musical concert experience and participation by a musician in a pre-recorded musical performance using a musical instrument as the control device.” (‘405 Patent, Col. 1:1 5-11)). The Background section then goes on to tout the system as “provid[ing] a source of entertainment to professional and amateur musicians alike” that would “assist musical instrument manufacturers in promoting the sale of their instruments by allowing a prospective purchaser *to recreate a musical concert, to simulate the musician's participation in the concert*, and to control the sound portion of the concert through operation of the guitar or other instrument.” (*Id.* Col.1: 49-56, emphasis added).

The Summary of the Invention section also indicates that the participant is using the system as if involved in an actual live concert, whether that use is in the simulation mode or the bypass mode. Specifically, the Summary indicates that, in the simulation mode, use is made of a “musical sound that would be made during the prerecorded concert,” and, in the bypass mode “the musician can hear himself play the instrument in synchronization with the concert video track and the left and right concert sound tracks, thereby enhancing the level of simulated participation.” In fact, it is preferred that “the video portion of the pre-recorded concert is *filmed* as if ‘through the eyes’ of an onstage musician so that the user of the system can assume that role while playing the instrument.”

(Id. at Col.1: 62-67, Col. 2:1-6 & Col. 2:39-53, emphasis added).

Additionally, the Description of the Preferred Embodiments indicates that the invention contemplates a recording of a live (concert or studio) performance. In part, the Description provides:

Generally, the *pre-recorded musical concert will be recorded on video* using a stereoscopic camera to produce a “3D” playback effect, *with simultaneous audio recording of the concert sound tracks* and, usually, the instrument sound track. *Other backstage footage can be included to simulate the musician’s participation in pre-concert preparation and build-up.* To further create the virtual concert experience, *additional backstage and onstage audio can be recorded, either during filming of the actual musical performance or later in the studio.* The separate instrument sound track *can be recorded live in conjunction with the video and other audio portions of the musical concert or can be added later or re-mixed in the studio.* If the system . . . is to be used by an instrument manufacturer to promote the sale of its products, suitable marketing and promotional logos and messages can be superimposed over the concert video and/or audio while the system is in operation. To this end, the pre-recorded video can include a segment where the musician is shown selecting a specific manufacturer’s instrument to play on stage.

*One advantage of this system is that no computer is needed to operate or control it.* If a DVD player is used for AV player 14, multiple pre-recorded concert segments can be placed on the disc, *allowing the user of the system to easily switch to other programs (a jazz club, a country music festival, etc.), representing a favorite experience, venue or band.*

(Id. Col. 5:39-65).

The notion that a user of the system is involved as a participant in a live (albeit recorded) musical concert or studio session is carried over into Claim 1, and the other claims. “What is claimed” in the preface section of claim 1 is “a system for electronically participation by a user in a prerecorded musical performance[.]” (Id. Col 6:5-8). Claim 1 then goes on to describe the use of audio and video sources that allow the user to see and hear a recorded performance and participate in that performance through the use of a musical instrument.

Further, the `405 Patent distinguishes itself from the Bolas patent (Patent No. 5,513,129) by

describing the latter as presenting a “virtual environment such that the music effectively drives the display of an *animated* graphical scene.” (*Id.* Col 1:42-44, emphasis added). Unlike the Bolas patent and other prior art virtual reality systems, the `405 Patent contemplates a system that “minimizes the use of complex and expensive hardware and software,” something which is said to be “lacking in the prior art.” (*Id.* Col 1:57-60).

The `405 Patent repeated references to terms such as “prerecorded,” “musical concert experience,” “participation in a concert,” “recording of musical concert,” “concert video track,” “filmed,” “recorded on video,” “audio recording,” “backstage footage” and “recorded live,” coupled with the fact that the `405 Patent eschews the need for the use of a computer to “operate or control” the system, all suggest the use of footage of live performances.<sup>9</sup> And, a person of ordinary skill in the art such as Loy “would understand that the ‘pre-recorded’ concert referred to in the `405 patent is a live concert, not an animated videogame,” (Loy Decl. Docket No. 55 at 32 ¶ 96), just as the Activision court found that “no reasonable person of ordinary skill in the relevant arts would interpret the `405 Patent as covering interactive video games.” Activision Publ’g, Inc. v. Gibson Guitar Corp., 2009 WL 586629 at \*5 (C.D. Cal. Feb. 26, 2009). Consequently, when Johnny strikes up the band, the performers on screen would be live action and not animated characters.

## **2. A musical instrument adapted for (i) making musical sounds and (ii) generating an instrument audio signal representative of the musical sounds**

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<sup>9</sup> This is the type of “simulation” that the `405 Patent envisions. Gibson’s reliance on dictionary definitions of the term “simulation” to support the construction that the phrase “electronically simulating participation by a user in a pre-recorded performance” means “a *game* allowing a user to participate in a pre-recorded musical performance” (Docket No. 54 at 7, emphasis added) is misguided. A word’s “proper construction requires consideration of the context of the rest of the term,” Ultimax Cement Mfg. Corp. v. CTS Cement Mfg. Corp., 587 F.3d 1339, 1347 (Fed. Cir. 2009), and “[i]t is improper to read a term to encompass a broader definition simply because it may be found in a dictionary[.]” Nystrom v. TREX Co., 424 F.3d 1136, 1145 (Fed. Cir. 2005).



***(a) A Musical Instrument Adapted for Making Musical Sounds***

The Court finds that “a musical instrument adapted for making musical sounds” is a musical instrument that is capable within the system of producing musical sounds when the instrument is played. This follows from the patent’s indication that it is a system and method wherein “a musician can simulate participation in a concert by playing a musical instrument.” (405 Patent Abstract).

Like the court in Activision, this Court “concludes that musical sound must have more articulable characteristics than a button’s clack or the thud produced from striking a table, piece of rubber, or piece of plastic.” (Docket No. 54-8 at 15). Gibson is estopped from arguing otherwise because, in distinguishing the Zimmerman patent during the reexamination proceedings, it specifically noted the Activision court’s finding about a “button’s clack.” Gibson observed that the instruments controllers were “shaped like conventional musical instruments (*e.g.* a violin, a cello, a flute, or a guitar),” but, unlike regular musical instruments transmit “the gestures and expression commands of a player to a computer” and “[t]hus, the instrument controllers are not musical instruments adapted for making musical sounds.” (Docket No. 55-15 at 13).

The `405 Patent, on the other hand, provides for musicians to use musical instruments and the audio signals generated by actually playing those instruments for participation in a musical concert. While Gibson seeks a construction that Claim 1 contemplates “a musical instrument adapted for making musical sounds *like* an actual musical instrument when the instrument is played,” (Docket No. 90 at 2, emphasis added), such a construction ignores the fact that the “musical instruments”/controllers in Zimmerman produces sounds “like an actual musical instrument” because when utilized they produce signals which are turned into music.

***(b) Instrument Audio Signal***

The Court finds that “instrument audio signal” is an analog signal output by a musical instrument. This construction is consistent with the construction placed on the term in Activision, as well as the patent itself.

As indicated, the Activision court construed “instrument audio signal” to be limited to analog signals, although that construction occurred during the summary judgment phase.<sup>10</sup> Nevertheless, Gibson was aware of that construction and told the examiner that its amended patent was intended to conform with the Activision court’s claim construction. See, Teleflex, 299 F.3d at 1325 (citations omitted) (“Arguments and amendments made during the prosecution of a patent application and other aspects of the prosecution history, as well as the specification and other claims, must be examined to determine the meaning of terms in the claims” and “the prosecution history (or file wrapper) limits the interpretation of claims so as to exclude any interpretation that may have been disclaimed or disavowed during prosecution in order to obtain claim allowance”).

The Activision decision (and Gibson’s acceptance of that decision) aside, the `405 Patent calls for an analog limitation in terms of the instrument audio signal. To begin with, both Gibson’s expert Ramanathan and 745’s expert Loy agree that Fig. 2 of the `405 Patent discloses a system using analog circuitry. This alone is not dispositive because it represents it is just one possible embodiment of the invention, but other things within the patent indicate it envisions an analog instrument audio signal.

Throughout the patent, reference is made to electric and amplified acoustic guitars as being

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<sup>10</sup> Interestingly, Gibson seeks a construction in this case which defines the term as “an electrical quantity that carries sound or information created based on the sound produced by the instrument.” The inclusion of “information” is not even consistent with the Activision court’s initial claim construction because that court originally construed “instrument audio signal” as “an electrical signal output by a musical instrument.” (Docket No. 54-7 at 7).

used as instruments in the system, both of which output audible signals. Further, the patent disavows the need for computers and/or hardware and software. Additionally, the `405 Patent mentions digital five times (and three times in the same paragraph), but always in the context of the system's output and the recorded soundtrack, not with respect to the musical instrument or its instrument audio signal. This is significant because the prior art which Gibson was required to distinguish disclosed instruments outputting digital signals into the system, such as the Zimmerman patent which connected to a computer through a MIDI interface device, and the Johnson patent (Patent No. 5,393,926) wherein a user played a "virtual guitar" that generated digital signals. These types of "instruments" in the prior art (like the controller in Guitar Hero) do not produce audible sounds, but rather send encoded messages that must be interpreted by digital electronics such as a computer. Again, the `405 Patent contemplates no need for a computer.

At the evidentiary hearing, Ramanathan explained that, at the time of the invention, those skilled in the relevant art understood that analog signals could be converted to digital signals and vice versa. Gibson takes this and argues that the phrase "indirectly through an interface device" (which is found in a few of the dependent claims) could be read to encompass a musical instrument with an analog-to-digital converter with the control circuit modified to include a digital to analog converter which would allow processing of the signal through the control circuit. While that is theoretically possible, there is nothing in the patent discussing analog-to-digital conversion of the audio signal. Rather, the only disclosure is of an analog signal processing of the electrical audio signal generated by actually playing a musical instrument. An inventor is entitled to protection only for that which was actually invented, and its right to exclude others "does not overreach the scope of the inventor's contribution to the field of art as described in the patent specification." Atlantic

Research Marketing Sys., Inc. v. Troy, 659 F.3d 1345, 1355 (Fed. Cir. 2011).

**(c) representative of the musical sounds**

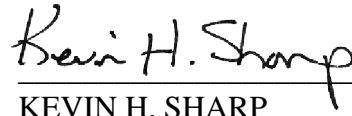
The Court finds that “representative of the musical sounds” means a musical sound that correlates to that produced by the musical instrument. This conclusion is necessitated by the intrinsic record, specifically the Activision ruling, and Gibson’s response thereto.

Gibson seeks to have “representative of” a musical instrument construed as “created based on” a musical instrument, claiming this is its “plain and ordinary meaning.” (Docket No. 54 at 12). Gibson does so by relying upon dictionary definitions that define represent as “to serve as a sign or symbol,” “to take the place of in some respect,” or “to act in the place of.” (Id.). This it cannot do in light of the prosecution history.

“Representative of” was added during the reexamination proceedings as a consequence of the Activision court’s ruling that musical instruments in the ‘405 Patent must be capable of making musical sounds, and that “data on location-mapped signals and limited velocity data are not enough for any reasonable person to conclude that [a] signal dispatched from a Guitar Hero controller to a game console is sufficiently representative of the actual sounds that are made by the controller to come within the ‘405 patent.” (Docket No. 54-8 at 16). Gibson informed the examiner that it was conforming its claims to comply with the Activision court’s decision and cannot now ignore the ruling or its representation to the Patent Office by offering what it claims to be the “plain and ordinary meaning” of “representative of musical sounds.” See, Teleflex, 299 F.3d at 1325 (“the prosecution history may demonstrate that the patentee intended to deviate from a term’s ordinary and accustomed meaning”).

**III. CONCLUSION**

The Court need go no further at this point. The Court will enter an Order granting 745's Motion for Application of Collateral Estoppel, denying both parties' Motions to Strike expert testimony, and confirming the claim construction set forth herein.

A handwritten signature in black ink that reads "Kevin H. Sharp". The signature is written in a cursive, slightly slanted style. The "K" is large and loops around the "e". The "H" is formed by two vertical strokes. The "S" is a large, sweeping curve. The "h" is a smaller curve. The "a" is a simple loop. The "r" is a vertical stroke with a small hook. The "p" is a vertical stroke with a long, sweeping tail that loops back under the "r".

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KEVIN H. SHARP  
UNITED STATES DISTRICT JUDGE